

PEKIN, M.

N. S. GOLDFEV, Za Ovladenie Tekhniki Kozhevennoe Proizvodstvo 1931,
No. 2, 17-18

KABEL'SKIY, I.M., kand.tekhn.nauk; PESKIN, M.D., inzh.

Introducing automatic control in the production of parts made
from thin metal sheets. Mash.Bel. no.4:38-47 '57. (MIRA 11:9)
(Sheet-metal work) (Automatic control)

L 63884-65 ENT(1)/EEC-4/EWA(h) GG

ACCESSION NR: AP5021565

UR/0286/65/000/013/0034/0035
621.316.543.2

AUTHOR: Peskin, N. A.; Ioran, M. L.

TITLE: A multiposition coaxial switch. Class 21, No. 172377

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 34-35

TOPIC TAGS: electric switch, coaxial cable

ABSTRACT: This Author's Certificate introduces a multiposition coaxial switch which contains a drive motor connected to a rotor. The rotor is equipped with a bent section of coaxial line and a stator. Connectors are mounted around the edge of the stator for connecting the lines being switched. A single connector is mounted on the end of the switch along its axis of symmetry. The switch is designed for connecting all lines in pairs, or for consecutively connecting any line to the connector mounted along the axis of symmetry of the switch. The connectors are located on the stator faces. The rotor is equipped with additional straight sections of coaxial line mounted in the axial direction along its circumference. Fastened to both sides of the rotor are discs with control solenoids. These discs are also equipped

Card 1/3

L 63884-65

ACCESSION NR: AP5021565

with straight sections of coaxial line mounted along the circumference in the axial direction. 2

ASSOCIATION: Organizatsiya gosudarstvennogo komiteta po radioelektronike SSSR
(Organization of the State Committee for Electronics, CCSR) 55

SUBMITTED: 24Jun63

ENCL: 01

SUB CODE: EE

NO REF SOV: 000

OTHER: 000

Card 2/3

L 63884-65

ACCESSION NR: AP5021565

ENCLOSURE: 01

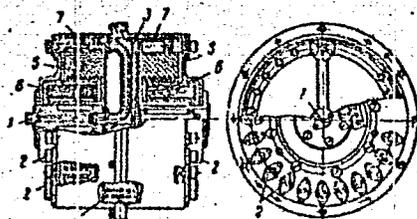


Fig. 1. 1--connector mounted along the axis of symmetry; 2--connectors on the stator faces; 3--rotor; 4--sections of coaxial line on the rotor; 5--discs; 6--control solenoids; 7--sections of coaxial line on the discs

Card 3/3

PESKIN, Ya.I., inzh.

Some problems of the effect of greasing materials on the mechanical properties of Russian leather. *Izv.vys.ucheb.zav.; tekhn.prom. no.4:54-60 '61.* (MIRA 14:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti. (Leather--Testing)

PESKIN, Ya.I., inzh.

Effect of the preliminary treatment of porpoise oil used for stuffing on the mechanical properties of Russian leather. Izv.vys.ucheb.zav.; tekhn.prom. no.3:59-61 '61. (MIRA 14:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy promyshlennosti. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti. (Leather)

29

CA

Kid leather from abropakin. Ya. I. Peskin and A. A. Averbukh. U.S.S.R. 64,481, April 30, 1945. In order to preserve in the raw skin as much of the noncollagen components as possible and thereby to increase the strength of the finished product, the skins are soaked for 2-24 hrs. without astringent, and limed for 5-6 hrs., with the least possible delay in the sequence of the operations preceding tanning proper. M. Hosh

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

11

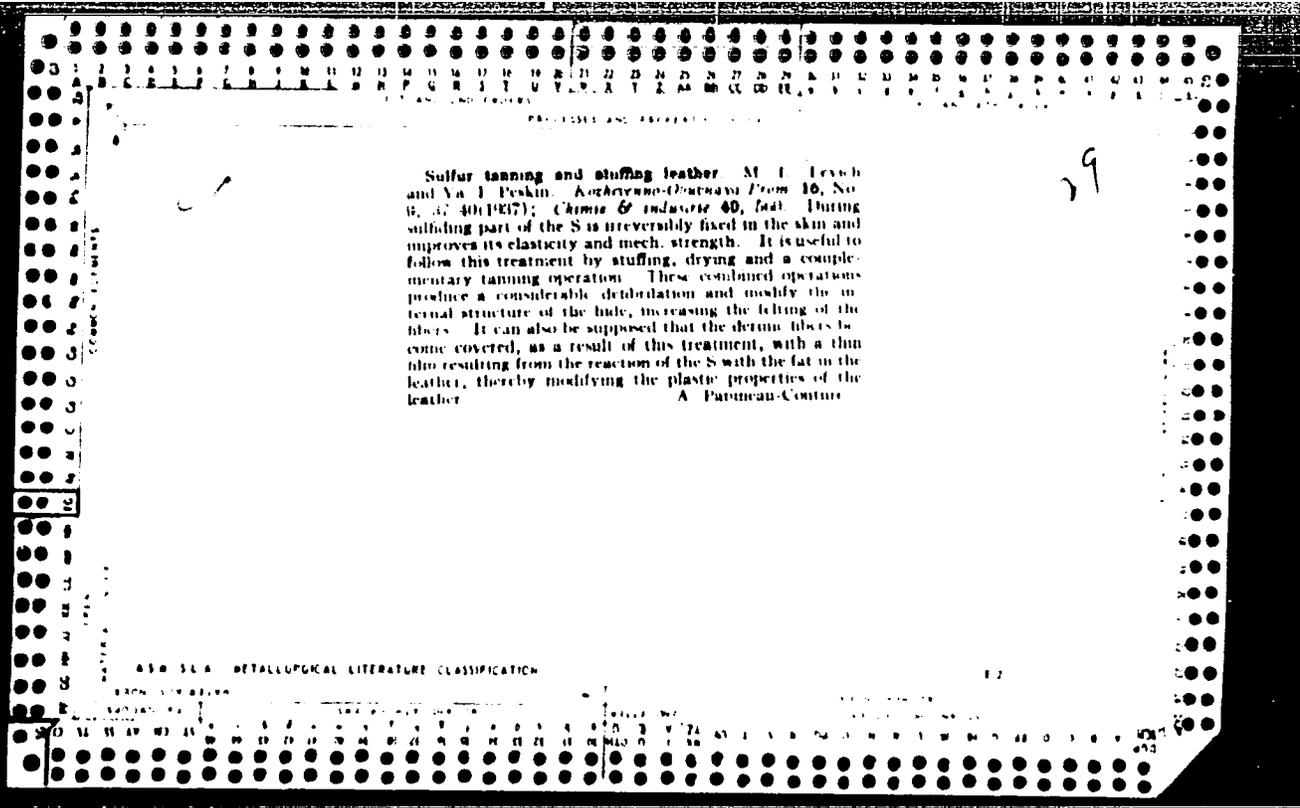
29

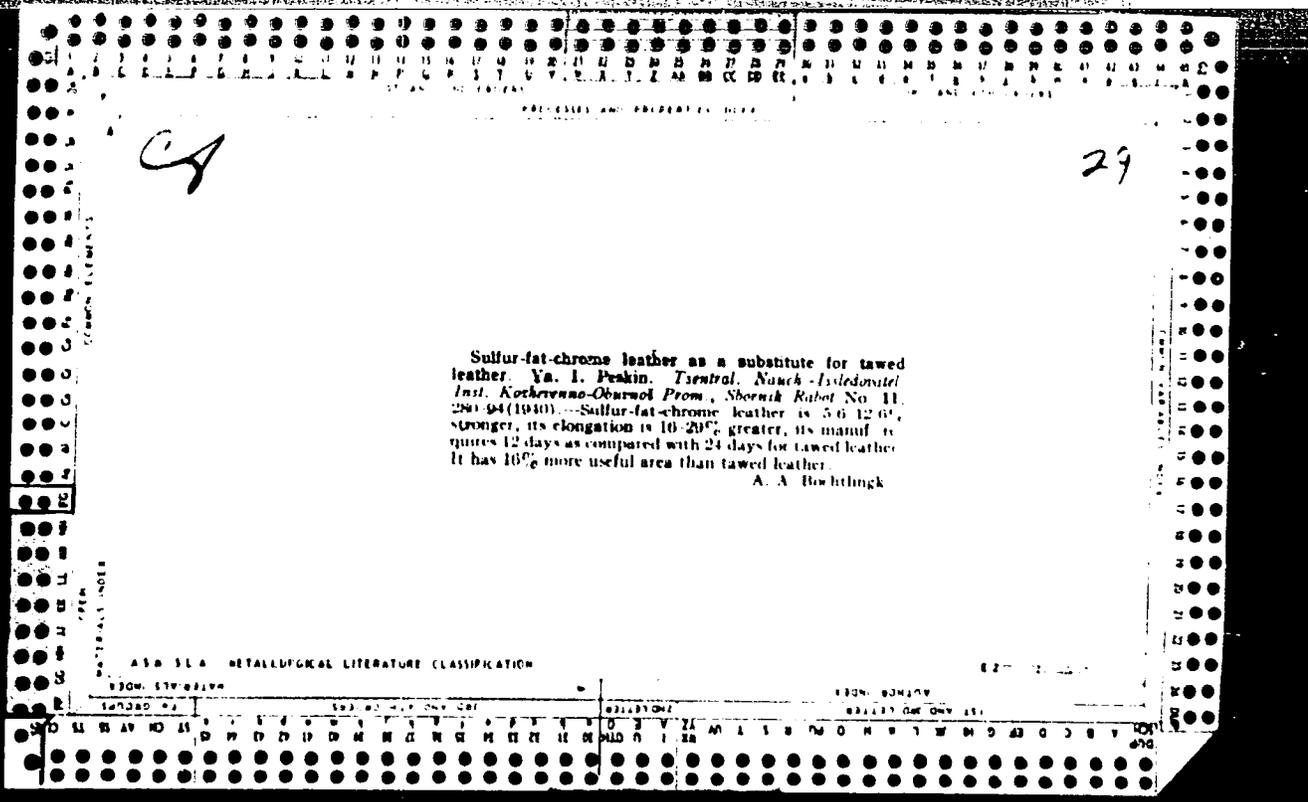
PROCESSES AND PROPERTIES INDEX

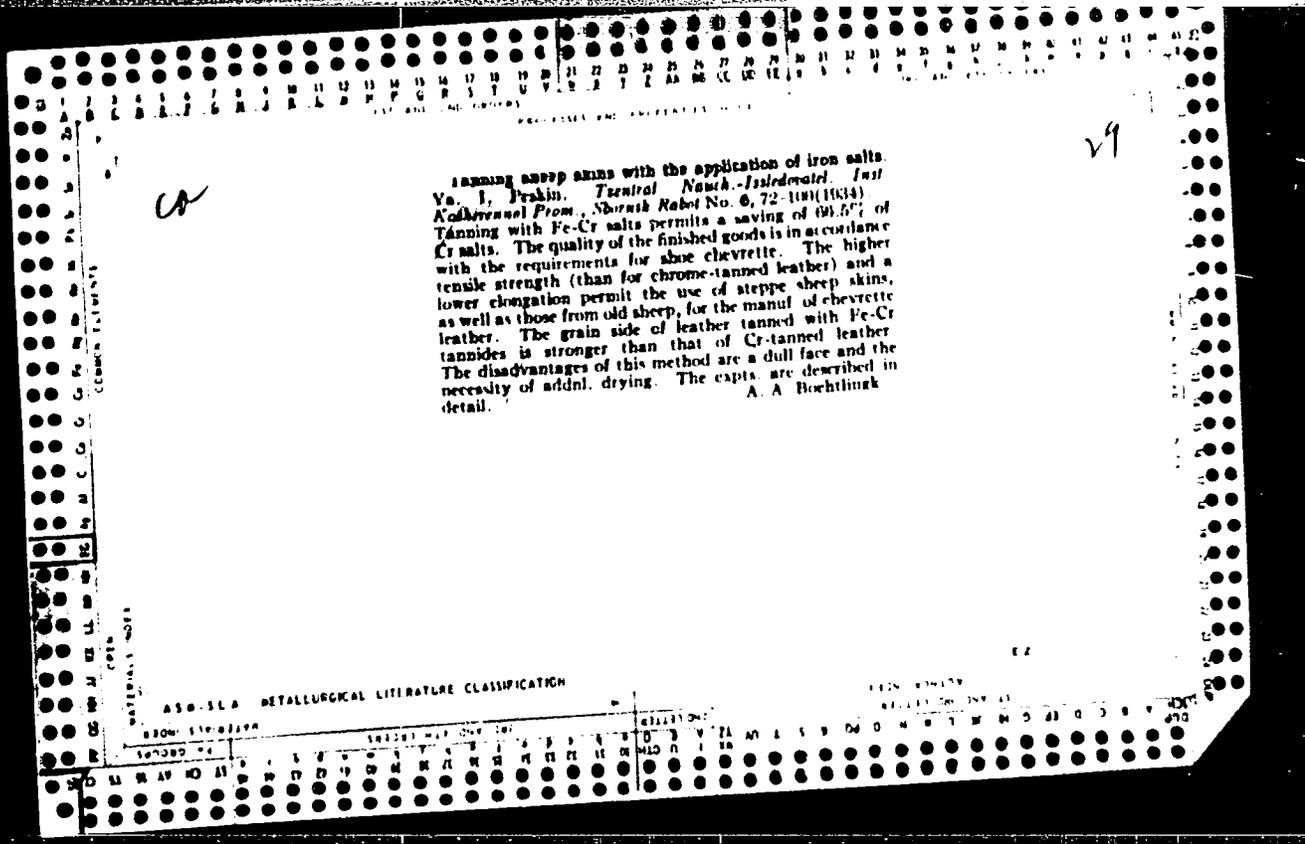
Absorption of fats from leather. Ya. I. Prakin. *Zh. khim. Prom.* 1941, No. 1, 35 B. - The use of mineral oils for fat liquoring of Russian leather has a harmful effect on its quality during use because the oils are easily carried away from the leather by the action of dust. Ordinary and sulfonated train oil can be replaced by sulfonated lard oil for fat-liquoring Russian leather. Beef fat can be replaced with lard oil not only in mixt. with hydrogenated fats of animal or plant origin but also with a large amt. of sulfonated animal oil or the solid portion of lard oil.

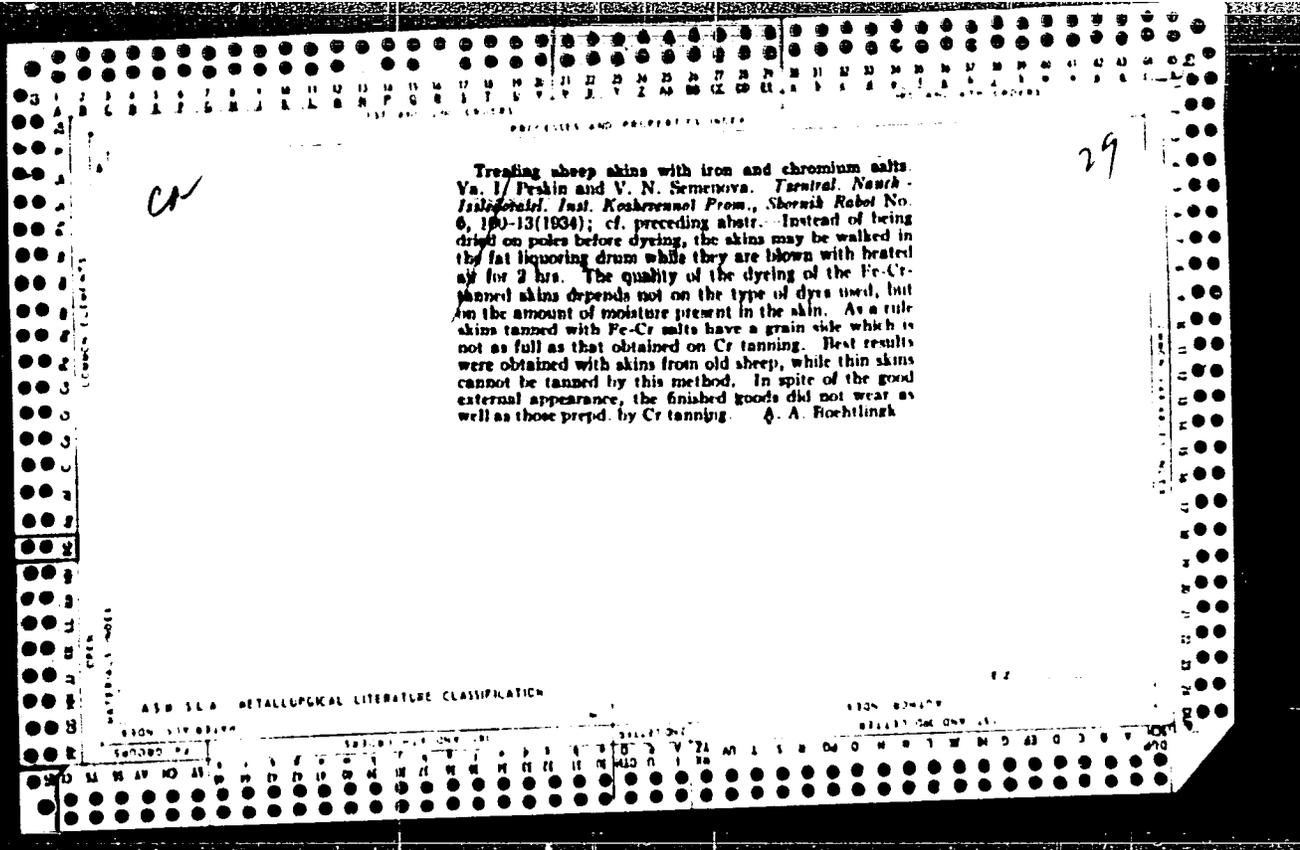
B. Z. Kamich

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION









PESKIN, Z.

More about the wages of coal miners. Sots.trud no.8:60-62 Ag '56.

(MIRA 9:10)

(Coal. mines and mining--Production standards)

ARBUZOV, S.V.; VAYSBERG, I. Ye.; SUCHKOV, V.G.; Prinsipali uchastiye:
LYUKSENBERG, M.S., nauchnyy sotrudnik; SHNAYDER, I.S., nauchnyy
sotrudnik; PESKIN, Ya.I., nauchnyy sotrudnik.

New standard methodology for the manufacture of leather for
sole parts from hogskins. Nauch.-issl. trudy TSNIKP no.33:
3-7 '63 (MIRA 18:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-
obuvnoy promyshlennosti (for Lyuksenburg, Shnayder, Peskin).

MIKHAYLENKO, Ivan Grigor'yevich; PESKIN, Zalman Izrailevich;
MOGILENKO, P.D., retsenzent; OSVAL'D, E.Ya., ved. red.

[Manual on wages in the coal industry] Spravochnoe posobie
po opiate truda v ugol'noi promyshlennosti. Moskva, Nedra,
1965. 298 p. (MIRA 18:7)

MIKHAYLENKO, Ivan Grigor'iyevich; PESKIN, Zalman Izrailevich;
MOGILENKO, P.O., otv. red.; OSVAL'D, E.Ya., red. izd-va;
IL'INSKAYA, G.M., tekhn. red

[Reference aid on wages in the coal industry]Spravochnoe poso-
bie po oplate truda v ugol'noi promyshlennosti. Moskva, Gos-
gortekhzdat, 1962. 258 p. (MIRA 15:9)
(Wages- Coal mines and mining)

[Handwritten: Peskin, Z.]
PESKIN, Zalman Izrailevich; KUZNETSOVA, N.I., red.; MALEX, Z., tekhn.red.

[Wages of workers in peat enterprises] Oplata truda rabochikh na
torfopredpriatiakh. [Moskva] Izd-vo VTsSPS Profizdat, 1957. 61 p.
(Peat industry) (Wages) (MIRA 11:5)

APPROVED FOR RELEASE: Tuesday, August 01, 2000, CIA-RDP86-00513R001240-2

tekhn.red.

[Wages in coal mining and slate industry enterprises] Oplata
truda na predpriatiakh ugol'noi i slantsevoi promyshlennosti.
Moskva, Izd-vo VTsSPS Profizdat, 1959. 146 p.

(Wages)

(Coal mines and mining)

(Slate)

(MIRA 13:8)

PES'KINA, A. L.

Kravets, T. P., Pes'kina, A. L. and Zhidkova, Z. V. Some new data on the absorption of light in solutions and in adsorbed layers. Pages 493 - 501.

SO: Bulletin of the Academy of Sciences, *Izvestia*, (USSR) Vol. 14, No. 4.
(1950) Series on Physics.

CA

3

New data on light absorption in solutions and in adsorbed layers. T. P. Kravets, A. L. Pes'kina, and Z. V. Zhidkova. *Izvst. Akad. Nauk S.S.S.R., Ser. Fiz.* 16, 493-501 (1950) - In some dyes of the triphenylmethane series the optical density of the soln. varies linearly with the thickness, but the straight line starts with an ordinate of a magnitude detd. by the wave length. This is attributed to the formation of a film of dye on the walls of the vessel and it is recommended to make absorption measurements at 2 thicknesses and take their differences. It is shown that deviations from Beer's law, attributed to the formation of a mixt. of several components, can be treated quantitatively by using Ostwald's diln. law. Spectral absorption curves for different concns. of mixed solns. all have to cross at a certain wave length, and observations on crystal violet and methylene blue substantiate this theory; from 3 measurements at this point the consts. necessary to sep. the absorption curves of the monomers and dimers can be detd. and such curves are traced for methylene blue. K., et al., also det. the consts. D and W of the formula $\alpha^2(1-\alpha) = (D/C\sqrt{T})e^{-W/RT}$ for methylene blue to $D = 5.31$ and $W = 5.40$ kcal./mole. Spectral absorption tests were made on chromatographic adsorptions of crystal violet dye on γ - Al_2O_3 , α - Al_2O_3 , and TiO_2 . Results show that the curves depend (1) on the nature of the adsorbent, (2) on the nature of the remaining solvent, if not completely dried, (3) on the temp. rise, which causes loss of absorption. S. Pakswar

ca

117

PROCESSES AND RECEPTORS

The biochemistry of suprarenal cortex in the adrenal system. VII. The influence of monocarboxylic acid and cyanides on the secretion and formation of adrenaline by the isolated suprarenal capsule. V. O. Osinskaya. *Med. expl.* (Ukraine) 1940, No. 3, 20-6; cf. *C. A.* 33, 1476¹, 1480¹.—Suprarenal capsules were perfused for 3-4 hrs. with O-sat'd. Ringer soln. of pH 7 at 38°, after which the adrenaline was det'd. by the method of Comessatti-Bailly. The addn. of CH₃CO₂H to the Ringer soln. at pH 7 produced on the av. no increase in total adrenaline compared with the results obtained with pure Ringer soln. At pH 4.5 there was a distinct increase, even in the individual portions of the perfusate. The addn. of NaCN caused an increase in adrenaline at pH 5.2 but not at pH 7. The total adrenaline at pH 4 was increased by the CH₃CO₂H as compared to the adrenaline content of the control suprarenal capsules. The results are interpreted as indicating the possibility of a "hidden" form of adrenaline.

VIII. The influence of amylase and of glyceraldehyde on glycolysis in the adrenogenic system. E. N. Pekina. *Ibid.* 27-35.—Suprarenal capsule exts. prept. with cold KCl soln. contained the active glycolytic system of the enzyme. When 2 mg. of the ext. was used with a phosphate buffer the increase in lactic acid from glycogen in 3 hrs. at 37° was up to 130%; from glucose, it was only 1-5%. Amylase from filtered saliva retarded glycolysis. Glyceraldehyde acted as a lactic acid former on spontaneous glycolysis, the amt. of the acid formed increasing with increasing concn. of the glyceraldehyde (0.0004-0.01 M). Glyceraldehyde retarded the glycolysis of glucose and of glycogen 30-40%. The action of the monomeric and binary glyceraldehydes was the same. Through *Chem. Zentr.* 1941, I, 227. M. G. Moore

ASO.SLA DETALLURGICAL LITERATURE CI

SEARCHED BY INDEXED BY SERIALIZED BY FILED BY

SEP 19 1961

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

113

ea

The biochemistry of adrenaline and the adrenal system. III. The action of glycolytic poisons (NaF, CH_3CO_2H) on glycolysis in the chromaffin tissue and in the sympathetic ganglia. E. N. Peshina and A. M. Uteva'kh. *Bull. biochem. exp. U.S.S.R.* 6, 694-7 (1958); *Chem. Zvest.* 1959, 11, 4506; cf. C. A. 54, 2461^g.—Data of the "initial" lactic acid content and tests for the presence of adrenaline-like substances were made on the suprarenal cortex and on the sympathetic ganglia of freshly slaughtered animals. By these measures a slight spontaneous glycolysis (increase in the lactic acid content after 2 hrs. from 3 to 30 mg. %) was detected in the tissues tested. This glycolysis could be definitely intensified by the addn. of 1% glucose or glycogen soln. The formation of lactic acid was definitely checked by NaF and CH_3CO_2H (concn. 0.15×10^{-2} to 1.5×10^{-2}), especially in the adrenal chromaffin substance. M. G. Moore

450-55A METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

COMMON ELEMENTS

COMMON TRANSITION METALS

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

1st AND 2nd ORDERS PROCESSES AND PROPERTIES INDEX 3rd AND 4th ORDERS

ca

118

Biochemistry of adrenaline and the adrenal system
IV. A nondialyzable adrenaline fraction in suprarenal
extract. A. M. Utevs'kii and E. N. Iusking. *Med.
zap. (Kramo)* 1939, No. 5-6, 17-17. *Chem. Zentr.*
1940, II, 048, of C. C. 35, 1040, 2020. A so-called
bound adrenaline was found in the nondialyzable portion
of suprarenal ext. which in contrast to effective adrenaline
reacts with its chromophore groups and apparently forms
an adsorption complex with the sol. proteins of the chro-
matin tissues. H. F. Wirth

ASS. I. A. METALLURGICAL LITERATURE CLASSIFICATION

1st AND 2nd ORDERS PROCESSES AND PROPERTIES INDEX 3rd AND 4th ORDERS

PES'KINA, YE. L.

42051: PES'KINA, YE. L., PRIYETKOVA, I. N., ZAVENIC, T. P. - E. Vozrozhdeniye nauki i tekhnologii. Dovedeniye k resheniyu. Izvestiya Vsesoyuznogo Nauchno-Issledovatskogo Tsentra, Seriya Fiz., 1948, No 5, p. 504-12

SO: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948

CA

3

The nature of large absorption bands. I. P. Kravets, Kh. I. Pechkina, and N. N. Pribytkova. *Fiz. Khim.* (USSR), No. 12, 501 (1978). Study of absorption spectra of several hundred dye ions shows a discrepancy of experimentally and theoretically calculated "halfband width". This discrepancy is attributed to the fact that the elementary band curve is in reality composed of several narrow elementary bands. If $\tau = 10^{-10}$ s (time between 2 deactivating collisions of the absorbing mol.) the half band width is 40×10^{-10} and the half band width of elementary bands is 0.4 to 0.6 $\times 10^{-10}$ s. In varying with the dye, the solvent and the concn. increased concn. changes the shape of the absorption max., which increases toward the long-wave end. This is attributed to a formation of polymers and colloidal particles. N. Piskunov.

NETHEBA, M.M.; BURGSDORF, E.B.; PRSKINA, Ye.N. (Khar'kov)

Amount of bisulfite-binding substances (BSV) in the urine of patients with trigeminal pains. Vrach.delo no.1:89-90 '60. (MIRA 13:6)

1. Tsentral'naya klinicheskaya psikhonevrologicheskaya i neyrokhirurgicheskaya bol'nitsa Ministerstva putey soobshcheniya (rukovoditel' raboty - S.R. Frenkel'). (TRIGEMIAL NERVE--DISEASES)
(ACETONE)

CIRIC, Stevan; SMEDEREVAC, Nenad; PESKIR, Petar

Obstructive jaundice caused by echinococcosis. Srpski arh. celok.
lek. 91 no.3:297-300 Mr '63.

1. Hirursko odeljenje Opste bolnice "Anca Rankovic" u Vrscu
Sef: dr Stevan Ciric Interno odeljenje Opste bolnice "Anca
Rankovic" u Vrscu Sef: dr Nenad Smederevac.

(ECHINOCOCCOSIS, HEPATIC)
(JAUNDICE, OBSTRUCTIVE)
(CHOLANGITIS) (SUPPURATION)

S

YUGOSLAVIA

Stevan GJIRIC, Nenad SMEDEREVAC and Petar PESKIR, Surgical Department: (Hirursko odeljenje) Chief (Sef) Dr Stevan GJIRIC, and Department of Internal Medicine (Interno odeljenje) Chief Dr Nenad SMEDEREVAC, General Hospital (Opsta bolnica) "Angja Rankovic", Vrsac.

"Obstruction Jaundice Due to Echinococcus."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 91, No 3, Mar 63; pp 297-300.

Abstract [German summary modified]: Frequency of human hydatidosis in the autonomous region of Vojvodina is increasing; 50% hepatic. Case history: woman aged 45, severe febrile icterus despite intensive antibiotic etc. therapy; surgery revealed hydatid cyst obstructing choledochus; slow but complete recovery. Photograph of specimen, 6 Yugoslav and 3 Western references.

1/1

I 59342-65 EFF(c) Pr-4 JW

ACCESSION NR: AP5015136

CZ/0009/65/000/006/0369/0370
536.422

20
19
B

AUTHOR: Pesko, K. (Peshka, K.)

TITLE: Calculating the vapor pressure from a single experimental determination

SOURCE: Chemicky prumysl, no. 6, 1965, 368-370

TOPIC TAGS: vapor pressure determination, critical heat, critical pressure, Antoine equation, Calingaert Davis equation, Riedel formula, aniline vapor pressure, reduced boiling point

ABSTRACT: The precise calculation of the relationship between vapor pressure and temperature usually employs the Antoine or Calingaert-Davis equations, for which two or three constants must be determined experimentally. Riedel has suggested a universal formula based on known critical values and one experimental determination of the boiling point, but if his critical values are not known, two experimental determinations are still required. This is explained in detail by developing methods of calculating the critical heat and critical pressure in case the boiling point is not decisive. The author then gives his formula for determining a reduced boiling point by the "group component" method with one unknown. Its

Card 1/2

L 59342-65

ACCESSION NR: AP5015136

application is illustrated in computing the vapor pressure curve for aniline, and its relative accuracy is proved in comparison with the critical temperature of aniline given in the literature. Orig. art. has: 12 formulas and 4 tables.

ASSOCIATION: Chemické závody Juraja Dimitrova, Bratislava (Juraj Dimitrov Chemical Works)

SUBMITTED: 17Dec64

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 006

Card 2/200P

2

PESHKOV, B.

CrySTALLIZATION OF SOLUTIONS. B. Peshkov (Inst. Phys. Problems, Moscow). Also Physichim. U.R.S.S. 21, 102-93(1948)(in English).—Crystals from the systems benzene-toluene, Hg-Zn, and KNO₃-H₂O was followed. The app. and exptl. procedure are described in detail. Measurements were made with a thermocouple accurately calibrated from -160 to 20°. Data for the 3 systems are tabulated. A eutectic close to 0.82% benzene is shown at -99°. Such a eutectic at 0.82% Zn and -42° was observed, and for the third system the eutectic is at 10.2% KNO₃ at -2.85°. Exams. of crystals from photomicrographs taken of this system without Nicol prisms and with crossed Nicols gave information that shows the role played by diffusion during crystal. A more detailed discussion is given in a thesis by P. (1944) in the Inst. of Phys. Problems of the Academy of Science U.S.S.R. The article attempts by the theory of diffusion to show the order of departure of real processes from equili. R. H. Lambert

ABSTRACT

METALLURGICAL LITERATURE CLASSIFICATION

INDEXING

KUTRYA, B.A., ...; PEBRAV, B.A., ...
... ..

Testing
no. 01/10/1971.

... ..
splyevy, ...

PESKOV, B. P. Cand Ped Sci -- (diss) "Methods of ^{raising} improving
^(of the Russian language among)
the orthographic literacy of 5th-class students of ~~Russian~~
~~in~~ Bashkir ~~and~~ schools." Mos, 1955. 15 pp; ^{100 copies} 22 cm.
(Acad Ped Sci RSFSR. Sci Res Inst of Methods of Teaching).
100 copies. (KL, 22-57, 107)

PODLAZOV, Ye.K., inzh.; PISKOV, B.S., inzh.

Modernization of MT circular knitting machines for the manufacture
of pile fabrics. Nauch.-issl.trudy VNIITP no 4:10-18 '63.
(MIRA 17:4)

PESEGV, B.S., inzh.

Braiding spindle with a double movement of the thread. Tekst.
prom. 20 no.6:36-38 Je '60. (MIRA 13:7)
(Braid) (Textile machinery)

SIROTININ, N.N., MERKULOVA, N.A., PESKOV, B.Ya., IVANOV, Yu.N.

Mikhail Vasil'evich Sergievskii; on his 60th birthday and 32nd
year of his scientific, pedagogical, and social activities.
Fiziol.zhur. 44 no.11:1095-1096 N'58 (MIRA 11:12)
(SERGIEVSKII, MIKHAIL VASIL'EVICH, 1898-)

MERKULOVA, N.A.; PESKOV, B. Ya.

Significance of the cerebral hemispheres in the pathogenesis of asymmetry and other disorders of respiration. Fiziol.zhur. 47 no.2:178-184, F '61. (MIRA 14:5)

1. From the Normal Physiology Chair of the Medical Institute, Kuybyshev.

(BRAIN)

(RESPIRATION)

BERGUYEVSKIY, M.V., Prof., Corresponding Member of the Academy of Medical Sciences., PESHKOV, B.Ya., Assistant, USSR.

"Traumatic and Other Diseases of the Spinal Cord," and presented research results on respiration and its peculiarities in people who have recovered from traumatic diseases and from sarcomas of the spinal cord following fully reversible or irreversible disorders.

Paper presented at 11th Session of AME USSR on Trauma, April 1957.

So: Sum. 1044

PESKOV, B.Ya., dotsent

Characteristics of respiratory regulation in focal lesions of the brain. Trudy Kuib.med.inst. 11:103-113 '60. (MIRA 15:8)

1. Iz kafedry normal'noy fiziologii (zav. kafedroy chlen-korrespondent AMN SSSR M.V.Sergiyevskiy) i iz kafedry nervnykh bolezney (zav. kafedroy prof. A.I.Zlotoverov) Kuybyshevskogo meditsinskogo instituta.

(RESPIRATION) (BRAIN--DISEASES)

PESKOV, B.Ya.

Respiratory reactions following unilateral section of the spinal
cord. Fiziol. zhur. 46 no.3:269-276 Mr '60. (MIRA 14:7)

1. From the Department of Normal Physiology, Medical Institute,
Kuybyshev.

(RESPIRATION)

(SPINAL CORD)

L 60990-55 EWT(1)/FGC Gi

ACCESSION NR: AP5018704

UR/0050/65/000/008/0021/0025
551.502/324+326/

AUTHOR: Peskov, B. Ye.

TITLE: Probability predictions of cumulonimbus clouds and thunder storms by consideration of composite synoptic data

SOURCE: Meteorologiya i gidrologiya, no. 8, 1955, 21-25

TOPIC TAGS: weather forecasting, probability, cloud, thunderstorm

ABSTRACT: This article discusses a method of solving the problem of predicting convective phenomena in the atmosphere. Data for study include 2500 records from 16 stations in various parts of European SSSR during July 1960 and June and July of 1961 and 1962. From these, empirical diagrams were made of probability of cumulonimbus clouds and thunder storms depending on degree of atmospheric instability, humidity, vertical currents, and distance from fronts. Three probability diagrams were constructed for sequential study of the effect of these four factors, each succeeding diagram considering and improving the results from the previous diagram. The first diagram shows the probability of cumulonimbus clouds as this depends on instability energy and on humidity of the air. The

Card 1/2

60998-65

ACCESSION NR: AP5018704

second diagram considers these data in the light of vertical currents at 700 mb. The third takes the results of the second and considers, in addition, distance to the pertinent front. The third diagram also shows probability of thunder storms. This probability was not shown on the previous diagrams because the general development is the same as for the cumulonimbus clouds. The use of all three diagrams increases the probability of prediction by several percent (2-11%), and the author urges its use. Orig. art. has: 3 figures.

ASSOCIATION: Tsentral'nyj institut prognozov (Central Forecasting Institute)

SUBMITTED: 12Jan65

ENCL: 00

SUB CODE: ES

NO REF SOV: G04

OTHER: 004

llc
Card 2/2

CHISTYAKOV, A.D.; BURKOVA, M.V.; ORLOVA, Ye.M.; GLAZOVA, O.P.;
PED', D.A.; BERLYAND, M.Ye.; ABRAMOVICH, K.G.; POPOVA,
T.P.; MATVEYEV, L.T.; BACHURINA, A.A.; LEBEDEVA, N.V.;
PESKOV, B.Ye.; ROMANOV, N.N.; VOLEVAKHA, N.M.; PHELKO,
I.G.; PETRENKO, N.V.; KOSHELENKO, I.V.; PINUS, N.Z.;
SHMETER, S.M.; KRYAZEVA, T.F.; MININA, L.S.; BEL'SKAYA,
N.N., nauchn. red.; ZVEREVA, N.I., nauchn. red.;
KURGAN'SKAYA, V.M., nauchn. red.; MERTSALOVA, A.N., nauchn.
red.; TOMASHEVICH, L.V., nauchn. red.; SAGATOVSKIY, N.V.,
otv. red.; KOTIKOVSKAYA, A.E., red.

[Manual of short-range weather forecasting] *Rukovodstvo
po kratkodorozhnyim prognozam pogody.* Leningrad, Gidro-
meteorolog. Pt.2. Izd.2. 1966. 499 p.

(MIRA 18:8)

1. Moscow, Tsentral'nyy institut prognozov.

L 24666-65 ENT(1)/FCC SSD(d) GN
AC: SION NR. AT4049311

S/2546/64/000/136,0061/006

8
7
BT

AUTHOR: Peskov, B. Ye.

TITLE: The role of nonturbulent vertical movements in the friction layer during development of a thick convective cloud cover and thunderstorms

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy*, no. 136, 1964. Voprosy* obrazovaniya i prognoza oblakov i tumanov (Problems in the formation and forecasting of clouds and fogs), 61-68

TOPIC TAGS: convective cloud, friction layer, atmospheric circulation, thunderstorm, dewpoint spread, cloud formation, vertical current, weather forecasting

ABSTRACT: Nonturbulent vertical movements in the friction layer were examined during three-hour intervals (0900-1200 and 1200-1500) in cases of thunderstorms of varying duration, showers, and cumulus congestus and cumulus cloud covers. It was found that these factors depend on the magnitude of vertical movements at various values of the lability energy and dewpoint spread at high altitudes. The velocity of nonturbulent movement was calculated by the Dyubyuk-Lebedeva formula

$$\delta p_{ess} = \frac{k^2 \cos \alpha}{\rho^2 h^2 \delta^2 u} \Delta p_0 + \frac{1}{\rho l^2} \left(z - \frac{l^2 \sin \alpha}{h^2 \delta^2 u} \right) \frac{d}{dt} \Delta p_0$$

(1)

Card 1/2

L 24666-65

ACCESSION NR: AT4049311

where δp_{850} is the individual change of pressure on a particle being vertically displaced near the 850 mb level; Δp_0 is the Laplacian of the ground pressure; ρ is air density; ζ is the coriolis parameter; h is the height of the surface boundary layer; b is the Prandtl constant; u is the characteristic velocity of the geostrophic wind at the upper boundary of the friction layer; α is the angle of deviation of the wind from the gradient at a height of 2m; k is the coefficient of turbulence; and z is the height at which the velocity of the vertical motion is determined. It was found that nonturbulent vertical movements in the surface boundary layer play an important role in the formation of convective clouds and thunderstorms. The motions are an impulse, stable in time and space, to large-scale ascending and descending convective movements under the conditions of unstable equilibrium that are characteristic of the lower troposphere during summer days. Relationships that can be used for compiling storm warnings even before thunderstorms develop and for morning forecasts of convective phenomena were elicited in this investigation. Orig. art. has: 5 tables, 2 figures and 2 formulas.

ASSOCIATION: Tsentral'nyy institut prognozov, Moscow (Central Institute of Forecasts)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 003

OTHER: 006

2/2

PESKOV, B.Yo.

Some features in the formation of cumulonimbus clouds and conditions for flying near them. Meteor. i gidrol. no.5: 22-27 My '63. (MIRA 16:5)

1. Tsentral'nyy institut prognozov.
(Coluds) (Meteorology in aeronautics)

DEKOV, B.Ya.

Role of regular vertical motions in the frictional layer in
the development of thick convective clouds and thunderstorms.
Trudy TSIP no. 130, 1968, 164.

Synoptic conditions of the formation of banks of convective
clouds according to materials of visual observations from
high-altitude and high-speed airplanes. Ibid. 19-80

(MIRA 1968)

05438
SOV/120-59-3-9/46

AUTHORS: Dmitriyev, A. B., Paskov, D. I., Kheyfets, A. B. and Chaykovskiy, V. G.

TITLE: Dose Characteristics of Low Voltage Halogen Counters (Dozovyye kharakteristiki nizkovol'tnykh galogennykh schetchikov)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 3, pp 47-49 (USSR)

ABSTRACT: The dose characteristics of the low voltage halogen counters STS-1, STS-2, STS-5, STS-6, STS-8, SGS-5, SGS-6, SBT-10 and SGS-7 have been measured and are now reported. The parameters of the first six counters were given by Dmitriyev (Ref 2, a review paper). The SGS-6 counter is similar to the SGS-5 but its cathode has a longer working length. The SBT-10 is designed to detect soft β -radiation and has a 30 cm² mica window. It consists of ten sections placed in a common envelope. The cathode of each section is in the form of a half-cylinder, 5 mm in radius. The anode of each section is 55 mm long and has a separate output terminal. In the SGS-7 counter the cathode and the anode are in the form of discs 10 mm and 0.5 mm in diameter, respectively. The gap between the discs is 1 mm. The electrical

Card 1/4

05438
SOV/120-59-3-9/46

Dose Characteristics of Low Voltage Halogen Counters

pulse height at large counting rate. Under these conditions the potential difference across the counter is not fully established. Since halogen counters give pulses with unequal amplitudes (Ref 3) it follows that some of the pulses may fall below the threshold of the detecting device. Table 2 gives the dose characteristics of the counters, where column 1 gives the type of the counter, column 2 the dose range in $\mu\text{r}/\text{sec}$, column 3 gives the counting rate at the appropriate dose in pulses/sec and column 4 the maximum counting rate in pulses/sec. Table 3 gives the dependence of the plateau slope on the dose, in which the first column gives the dose in $\mu\text{r}/\text{sec}$ and the second and third columns give the plateau slope in percent/Volt for the STS-5 and SGS-5 counters, respectively (the headings of columns 4, 5 and 6 are the same as those of 1, 2 and 3). Table 4 gives the resolving time of the counters. Column 1 of this table gives the type of the counter, columns 2 and 3 the resolving time in μsec at 100 pulses/sec and at maximum counting rate, respectively (columns 4, 5 and 6 have the same headings as 1, 2 and 3). The load resistance has a

Card 3/4

STEPANOV, A.S.; BORINOVA, A.G.; SIMAGINA, T.V.; PESKOV, G.D.

Use of the 43M phtalocyanine blue in printing. Tekst.prom.
22 no.11:56-58 N '62. (MIRA 15:11)

1. Sotrudnik Ivanovskogo nauchno-issledovatel'skogo instituta khlochatobumazhnoy promyshlennosti (IvNITI) (for Stepanov).
2. Rabotniki Kokhonskogo khlochatobumazhnogo kombinata (for Barinova, Simagina, Peskov).
(Textile printing) (Phtalocyanine)

Peskov, K.

KOREN'KOV, D., nauchnyy sotrudnik; PESKOV, K., nauchnyy sotrudnik.

Ammonia water. Nauka i pered. op. v sel'khoz. 7 no.12:28-29 D '57.

(MIRA 11:1)

1. Vsesoyuznyy institut udobreniy i agropochvovedeniya i agrotekhniki.
(Ammonia)

ZENKOVICH, B.A., kand. tekhn. nauk; PENKOV, O.I., kand. tekhn. nauk;
SABROVIN, V.I., doktor tekhn. nauk

Study of critical thermal currents in tubular heat emitting elements
of atomic electric power plants. Teploenergetika 11 no.6:20-22 Je
'64. (MIRA 18:7)

VOROPAY, A.P.; VYZHEKHOVSKAYA, M.F.; DRUGOV, I.P.; KOMARNITSKIY, Yu.A.;
MAKSIMENKO, I.I.; PAVLOVSKIY, V.V.; STEPANOV, D.A.;
CHEREDNICHENKO, Ye.T.; GANKIN, N.B., retsenzent; FATEYEV,
P.Ya., retsenzent; PESKOV, I.N., red.; DROZDOVA, N.D., tekhn.red.

[Competition for communist labor in railroad transportation]
Sorevnovanie za kommunisticheskiy trud na zheleznodorozhnom
transporte. Moskva, Transzheldorizdat, 1963. 158 p.

(MIRA 16:9)

(Socialist competition) (Railroads--Employees)

PESKOV, N.

Chto pokazyvaet analiz balansov 1939 goda. [What the analysis of financial statement of railroads is showing in 1939]. (Sots. transport, 1940, no. 6, p.8-18).
"Good article on railroad finances".

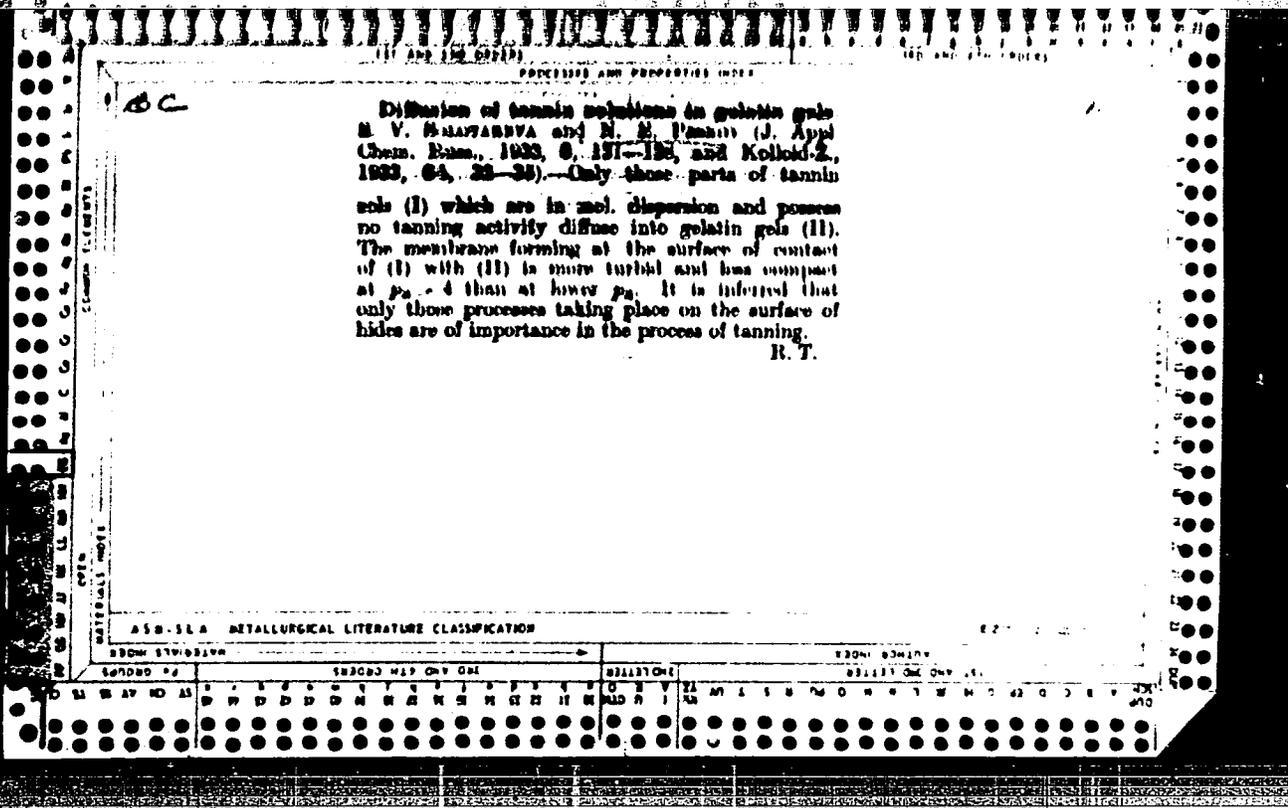
DLC:HE7.S6

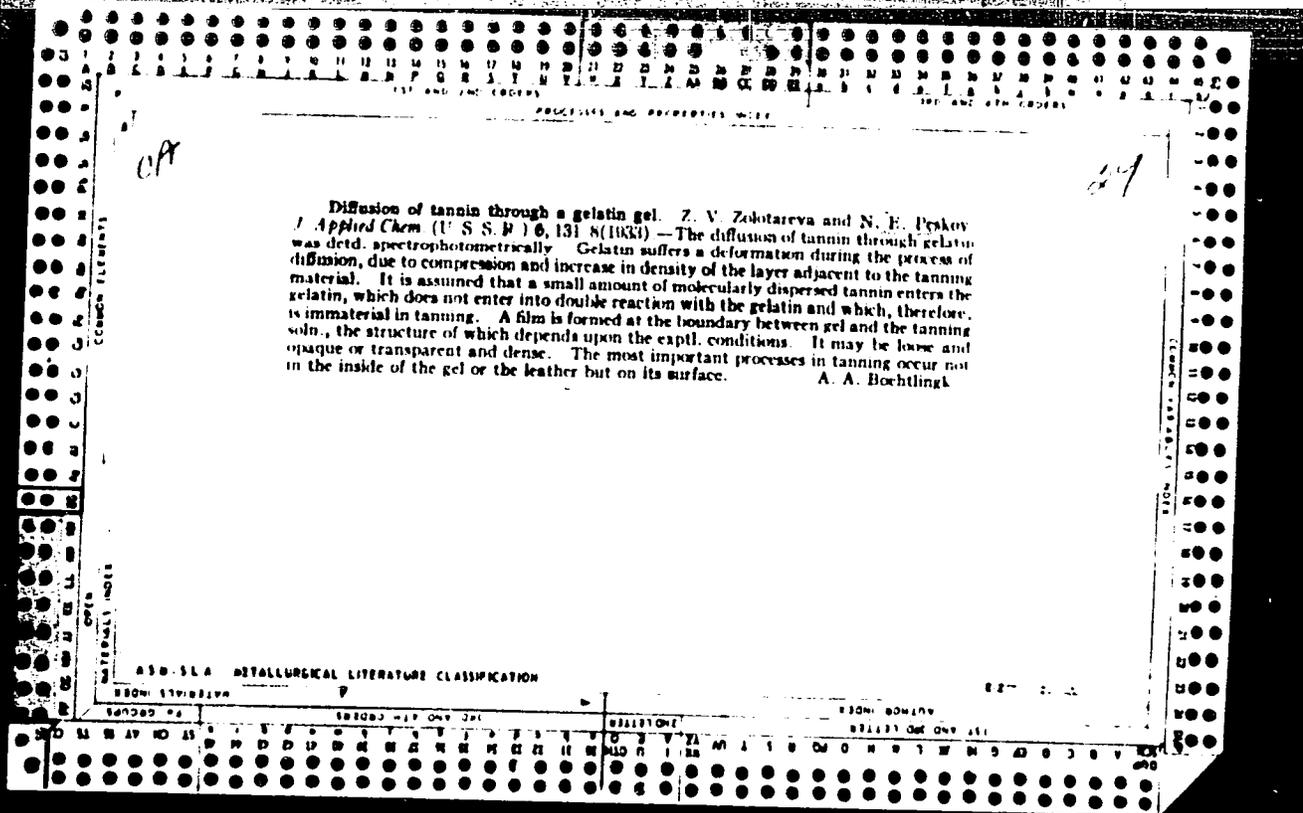
SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

PESKOV, N.

"Morskie Zveroboinye Promysly," Archangel, 1931

II



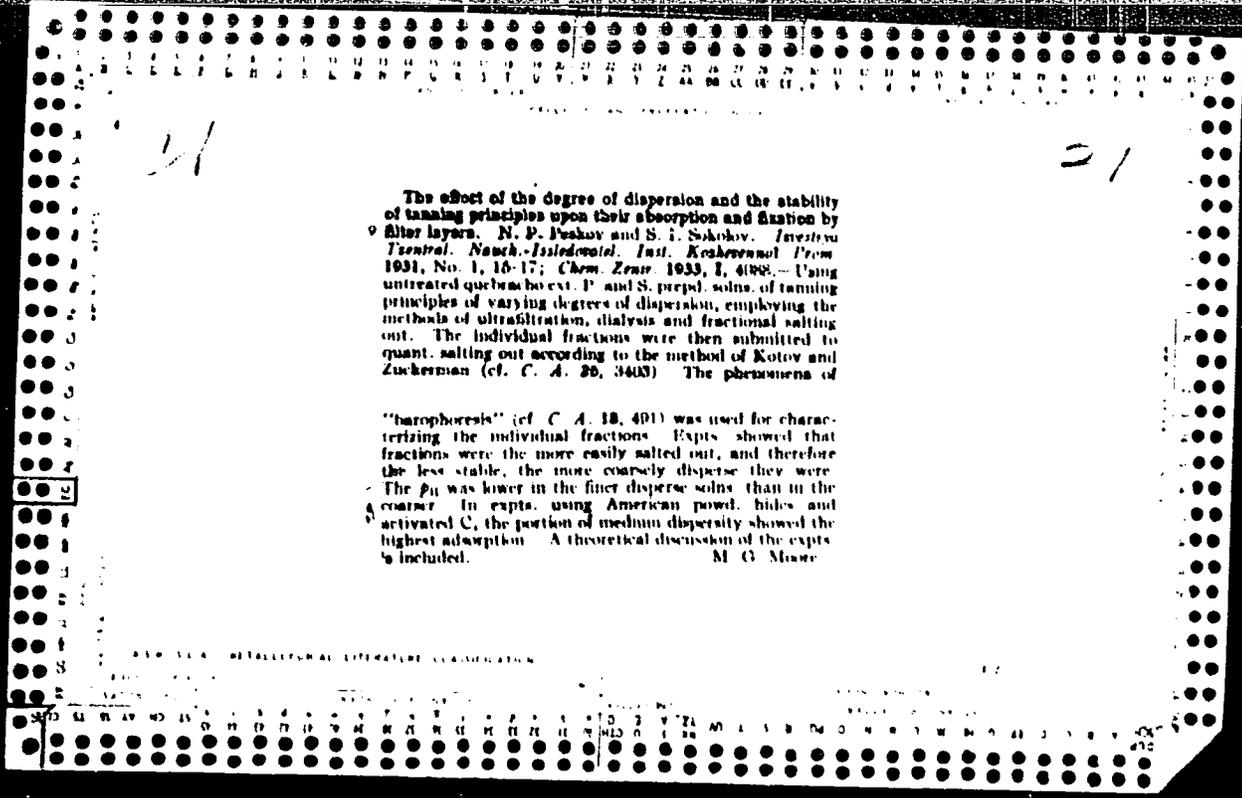


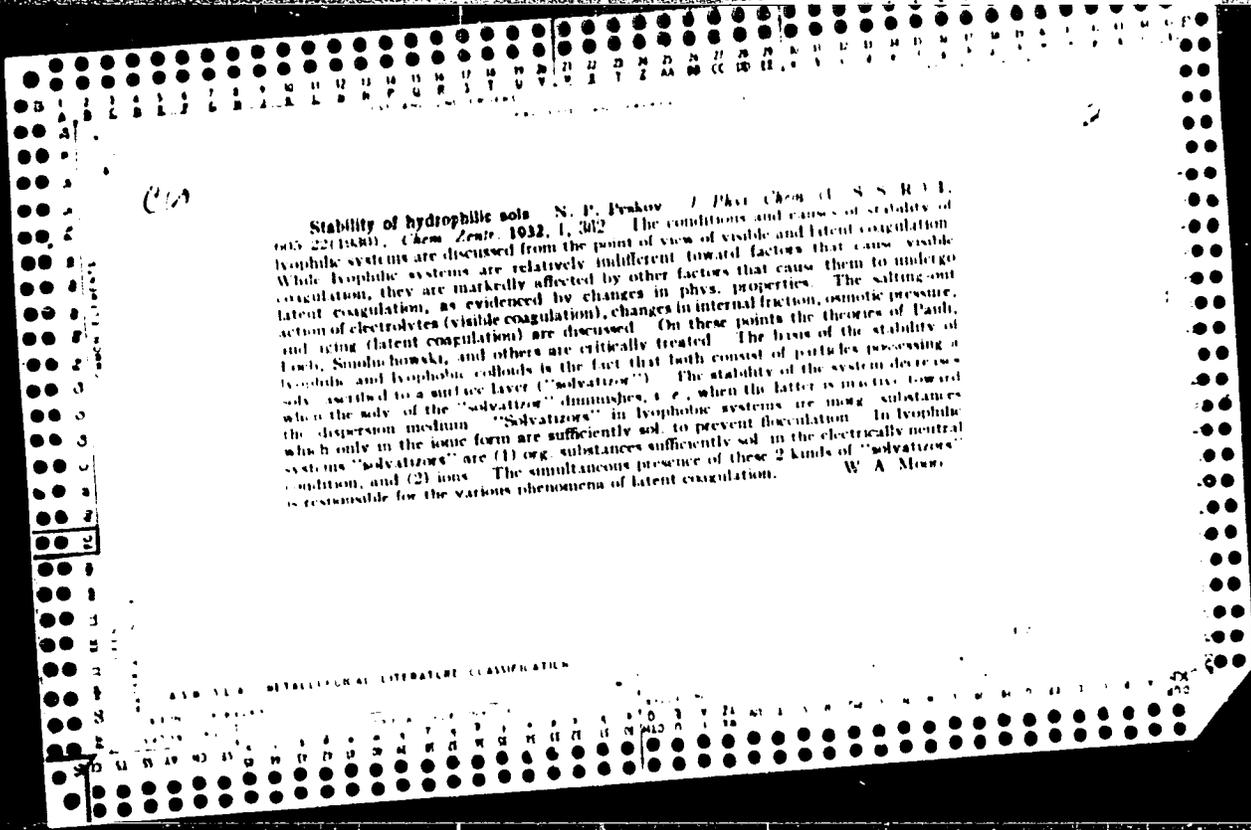
YESKOV, N.N.

Construction of ships for navigation in the
ice-bound areas. The Water Transport (Vodnyy
Transport), No. 6, 1934.

PESKOV, N.H.

The ships assigned for navigation in the ice-bound areas. Symposium of articles in "For the Soviet Navigation", VNITOVVT and LONITOVVT, Issue II, Leningrad, 1935.





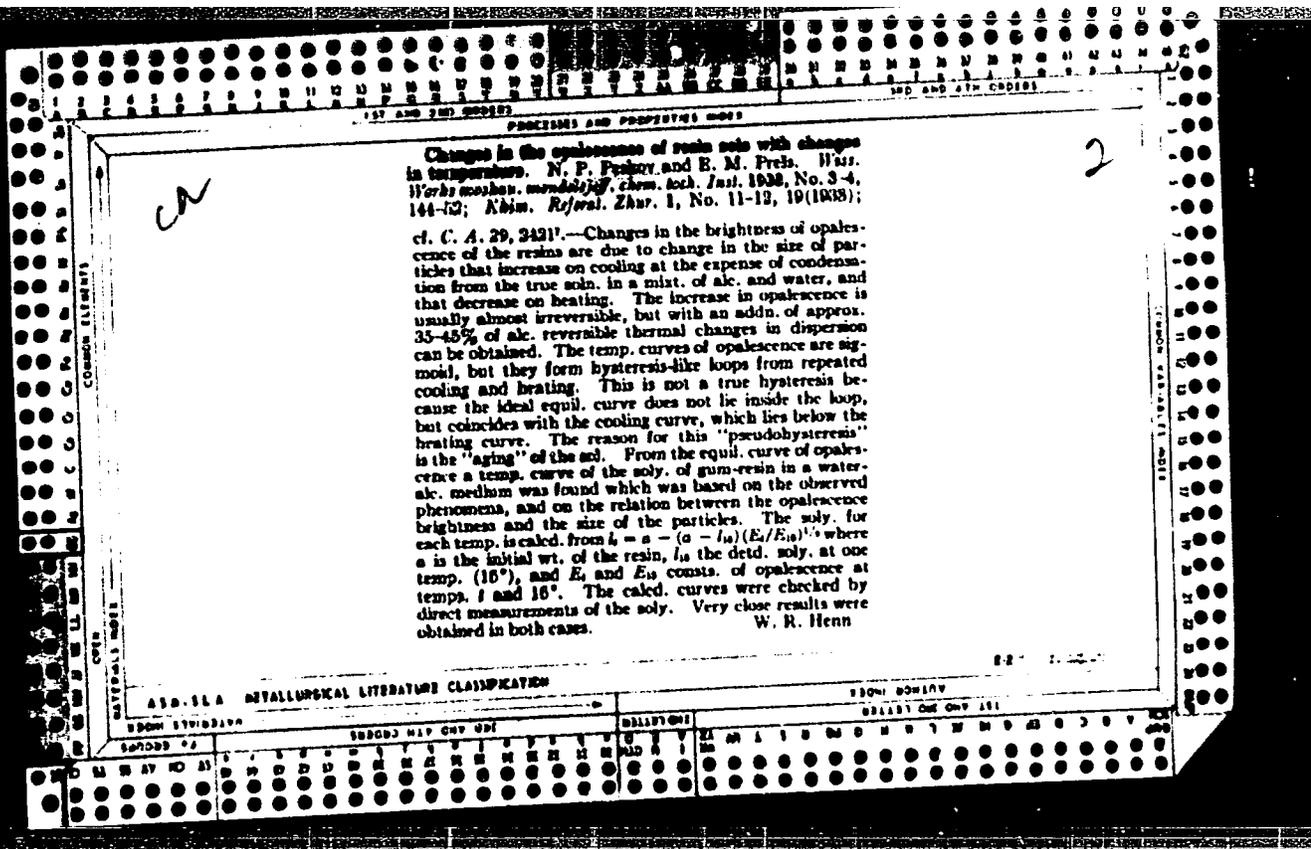
CA

2

Kinetics of the formation of colloidal solutions of copper oxide in the hydrolysis of copper succinimide. E. M. PUKIS AND N. P. POKROV. *J. Phys. Chem. (U.S.S.R.)*, 43-00(1962); cf. *C. A.* 23, 4052.—Cu succinimide was prepd by the action of metallic Cu (12 g) (first treated in a stream of H at 50° with dil. AcOH and mercuric acetate (0.4 g)) on a paste of mercuric succinimide (15 g) in 40 cc. H₂O. The mixt was shaken for 20 min. and then filtered, the blue soln. evapd in a vacuum H₂SO₄ desiccator to a crystal. Analysis indicated the hexahydrate, Cu(NC(O)H)₂·6H₂O. After some months the trihydrate was formed. The expl. mol. wt., 300.80, indicates 22% disocn in 0.0516 molar soln. The rate of formation of the colloidal CuO was followed by optical methods, by the ζ-potential method, by centrifuging out the CuO formed, and by the change of hydrolysis. The effects of gelatin, gum arabic and excess succinimide were neg. The velocity consta were: $K_{11} = 0.0012$, $K_{12} = 0.0002$ and $K_{13} K_{14} = 2.7$. The reaction is monomol. and autocatalytic, going through the stages Cu succinimide, basic Cu succinimide, Cu hydroxide, Cu oxide.

F. H. RATHMANN

ASB 514 METALLURGICAL LITERATURE CLASSIFICATION



PROCESSING AND PUBLISHING NOTES

7

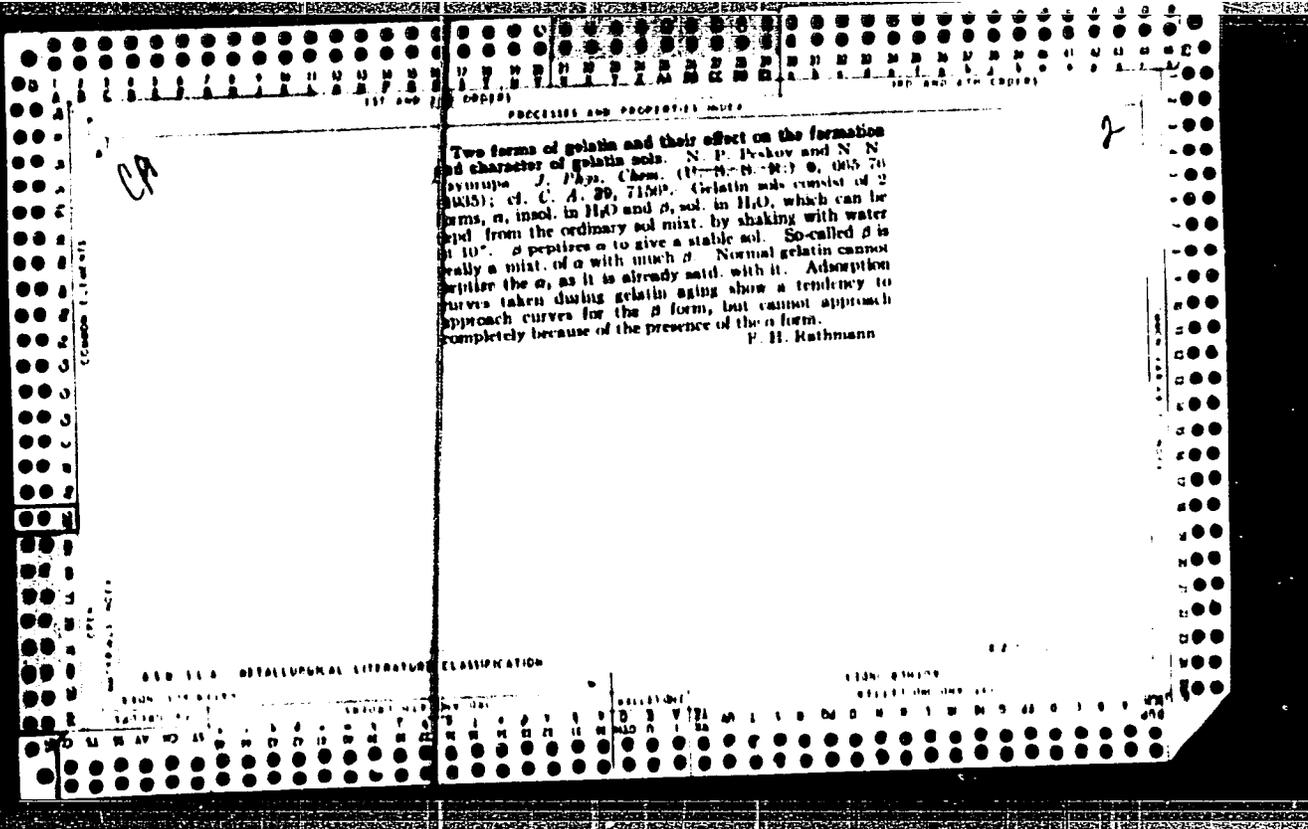
ca

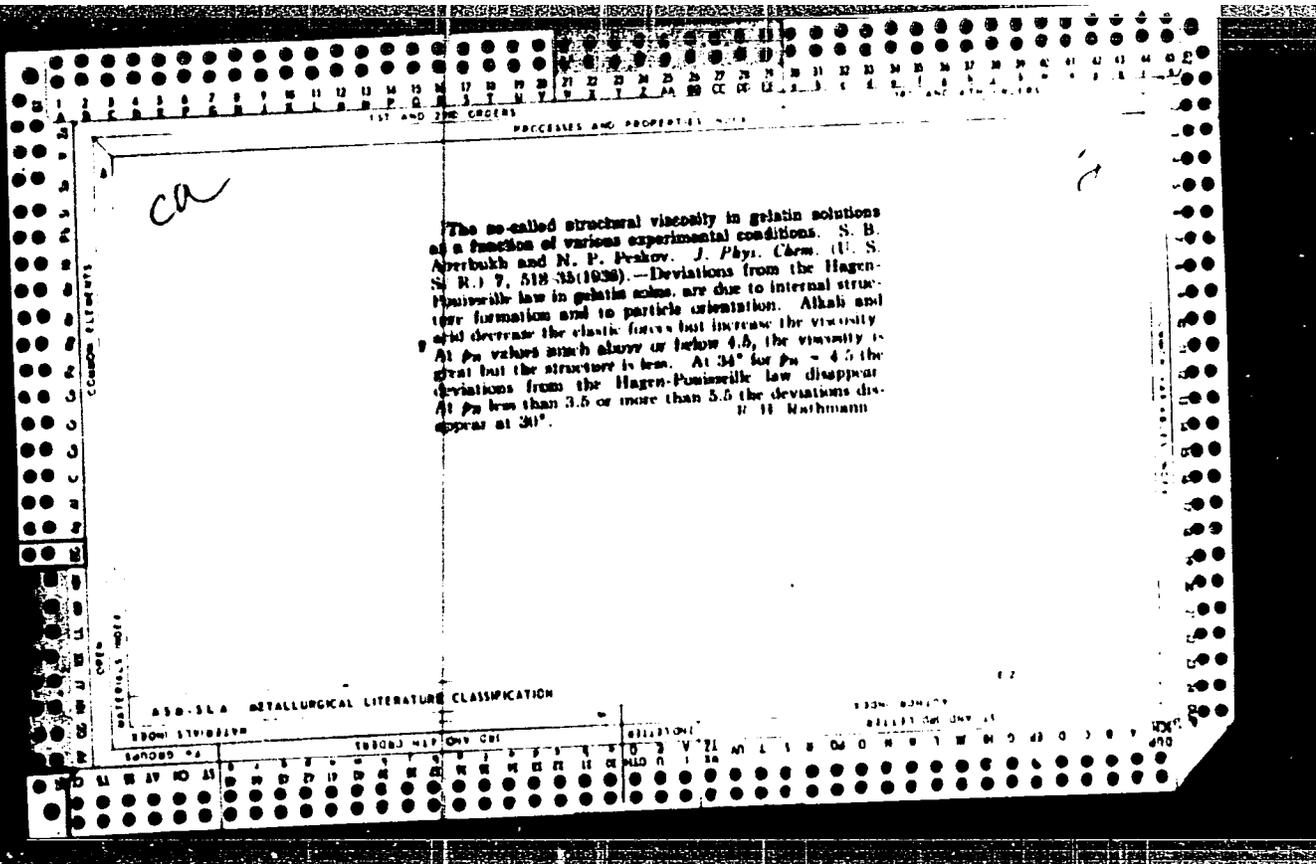
Structural viscosity of lyophilic sols. N. P. Lebedev and S. B. Averbukh. *Wiss. Werke moskau. menshkov. chem.-tech. Inst.* 1938, No. 3-4, 153-60; *Khim. Refeval. Zhur.* 1, No. 11-12, 19-20(1938).—For the investigation of the structural η of agar-agar sols a special viscometer was used with which η could be measured simultaneously at 3 different velocities. The principle of the viscometer is as follows: Three capillaries of different lengths are connected in parallel, and the amt. of the sol flowing through them in a definite time is measured. The agar-agar sol was prepd. by swelling the sample in water at 8-10° for 12 hrs. followed by boiling. The swelled (but not dissolved) particles of the gel were detd. by filtering through paper or through a piece of gauze. After this the sol was electrolysed. The amt. of the sol is reduced to 13% of the initial value after 40 hrs. of dialysis. The undialyzed sol has a much greater η than the dialyzed sol of the same concn., which is close to the η of pure water. The dialyzed sol shows no deviations from the law of Hagen-Poiseuille even at low temp. Agar-agar possesses properties of semi-colloids.

W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION AND INDEXING





PESKOV, N., starshiy master; BURDIN, A., starshiy master;
KORCHEMNYI, A., kalibrovshchik

New shape of a periodic plowshare band for agriculture.
Metallurg 7 no.7:29-31 JI '62. (MIRA 15:7)

1. Sortoprokatnyy tsakh Kuznetskogo metallurgicheskogo kombinata.
(Plows)

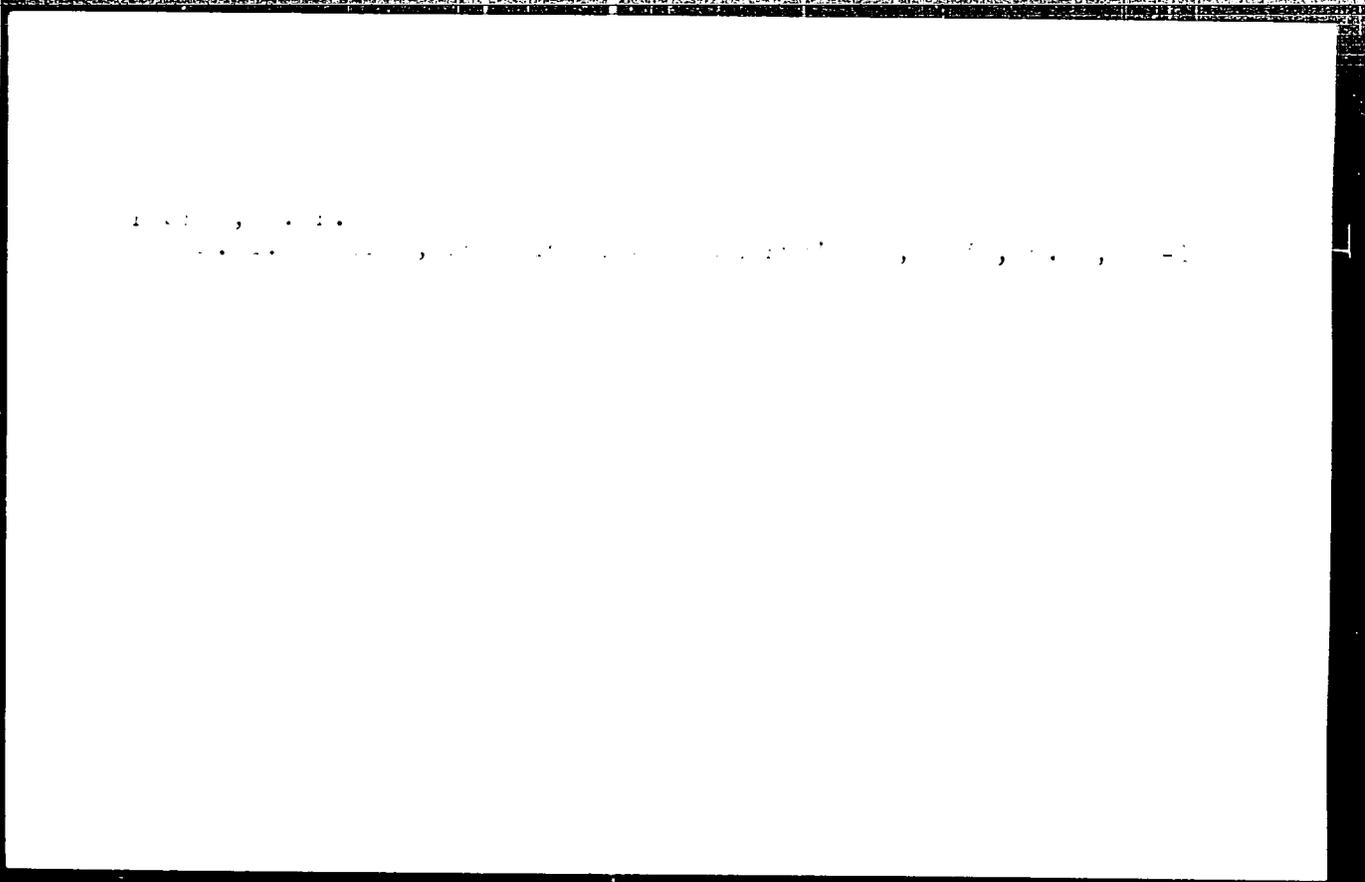
PESKOV, N.I.; OSOKIN, V.A.; KORCHEMNY, A.M., kalibrovshchik

Changing the grooving of the first stand on the 360 mill. Metallurg
7 no.4:29-31 Ap '62. (roll 15:3)

1. Starshiye мастера Sortoprokatnogo tsekha Kuznetskogo metallurgi-
cheskogo kombinata (for Peskov, Osokin). 2. Sortoprokatnyy
tsekh Kuznetskogo metallurgicheskogo kombinata (for Korchemnyy).
(Rolling mills)

PESKOV, N. P.

"Course in Colloid Chemistry" (bk), 1948.



PEKOV, N. P.

S. I. SKOLYV, Za Ovladenie Tekhniki Vozhevennoe Proizvodstvo,
1931, No. 2, 14-15

DYMAN, Vladimir Konstantinovich, prof., doktor sel'skokhoz.nauk;
PEKOV, Nikolay Vasil'yevich, prepodavatel' tekhnikum;
USTIMENKO, L.F., red.; GUREVICH, M.M., tekhn.red.

[Practical lessons in general animal husbandry] Praktikum po
obshchei zootekhnii. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960.
206 p. (MIRA 14:1)

1. Lipkovetovskiy sel'skokhozyaystvennyy tekhnikum Khar'kovskoy
oblasti (for Peskov).
(Stock and stockbreeding)

L 37094-66 EWT(1)/EWT(m)/T/EMP(t)/ETI IJP(c) GG/AT/WW/JD
ACC NR: AF6018137 SOURCE CODE: UR/0251/66/041/001/0045/0048

AUTHOR: Nakashidze, G. A.; Abramov, S. M.; Bedenashvili, B. G.; Machkalova, N. P.;
Kandelaki, M. O.; Kutaladze, L. M.; Peskov, O. G.

ORG: Academy of Sciences, Georgian SSR, Institute of Cybernetics (Akademiya nauk
Gruzinskoy SSR, Institut kibernetiki)

TITLE: Semiconductor source of visible radiation

SOURCE: AN GruzSSR. Soobshcheniya, v. 41, no. 1, 1966, 45-48

TOPIC TAGS: light source, gallium compound, phosphide, pn junction, photoelectric
property, semiconductor diode, semiconductor carrier, forbidden band, volt ampere
characteristic

ABSTRACT: The authors describe a diode emitting visible light, based on gallium phosphide with diffusion n-p junction, and describe some of its photoelectric characteristics. The light radiated by the diode is produced by recombination of non-equilibrium carriers through the impurity levels in the forbidden band, or by band-band recombination (Fig. 1). The volt-ampere characteristics taken at room temperature and at liquid-nitrogen temperature exhibit a sharp breakdown in both the forward and inverse directions. The spectrum at liquid-nitrogen temperature has three peaks at 7100, 6140, and 5650 Å, which successively decrease in amplitude with decreasing wavelength. There is no adequate explanation for the structure of the spectrum. According to preliminary data, the time constant of the radiation is 2×10^{-7} sec. The

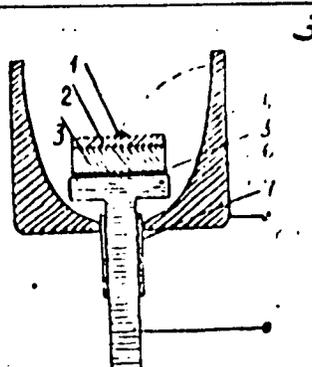
Cord 1/2

84
81
B

L 37094-66

ACC NR: AP6018137

Fig. 1. Construction of gallium-phosphide light source. 1 - Point contact, 2 - p region, 3 - n region, 4 - metal housing with reflecting internal surface, 5 - solid contact, 6 - copper cooling holder, 7 - insulation.



authors thank Professor N. A. Goryunova and A. B. Borshchevskiy for supplying the gallium-phosphide crystals. This report was presented by Academician V. I. Mamasakhlisov 25 February 1965. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 25Feb65/ OTH REF: 005

nd
Cord 2/2

ALEKSEYEV, G.V., inzh.; REMIZOV, O.V., inzh.; SERGEYEV, N.D., inzh.;
ZENKEVICH, B.A., kand. tekhn. nauk; PESKOV, O.L., kand. tekhn.
nauk; SUBBOTIN, V.I., doktor tekhn. nauk

Critical heat flows in a forced water current. Teploenergetika
12 no.5:47-51 Mr '65. (MIRA 18:6)

ACCESSION NR: AP4037634

S/0096/84/000/006/0020/0022

AUTHOR: Zenkevich, B. A. (Candidate of technical sciences); Paskov, O. L. (Candidate of technical sciences); Subbotin, V. I. (Doctor of technical sciences)

TITLE: Investigation of critical heat flux for tubular fuel elements of an atomic power plant

SOURCE: Teploenergetika, no. 6, 1964, 20-22

TOPIC TAGS: atomic reactor, atomic power plant, reactor operation, critical heat flux, boiling crisis

ABSTRACT: The authors investigated the boiling crisis during forced flow of underheated water in tubes containing a steam-water mixture. To eliminate the effect of tube diameter all experiments were performed on tubes with I.D. of 8-9 mm; tube lengths varied from 180 to 2100 mm, and pressures were 392-981 n/cm². The mass velocity of the water exhibited an ambiguous effect on the critical heat flux: in the region of underheated water both positive and negative effects were observed. In the region of the steam-water mixture the critical heat flux decreased with an increase in mass velocity over the entire range of velocities and

Card 1/2

ACCESSION NR: AP4037634

steam contents studied. At a constant mass velocity the critical heat flux decreased substantially with an increase in the enthalpy of the medium in the crisis zone. The validity of using the obtained data for calculating the critical heat flux in tubular fuel elements was established. Orig. art. has: 3 graphs and 1 table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 22 Jun 64

ENCL: 00

SUB CODE: NP

NO REF SOV: 007

OTHER: 001

Card 2/2

L 65197-65 EWT(l)/EWP(m)/EWA(d)/FCS(k)/EWA(l)

ACCESSION NR: AP5006297

S/0096/65/000/003/0047/0051

621.1.016.4

AUTHOR: Alekseyev, G. V. (Engineer); Remizov, O. V. (Engineer); Sergeyev, N. D. (Engineer); Zenkevich, B. A. (Candidate of technical sciences); Paskov, O. L. (Candidate of technical sciences); Subbotin, V. I. (Doctor of technical sciences)

TITLE: Critical heat fluxes during forced flow of water

SOURCE: Teploenergetika, no. 3, 1965, 47-51

TOPIC TAGS: fluid flow, forced flow, flow analysis, external flow, internal flow

ABSTRACT: The authors examine experimental data on the boiling crisis during forced flow of underheated water and of a water-steam mixture in tubes. These data are compared with those on external flow around an isolated tube in a symmetric annular space, flow around a tube located along the axis of a square channel, and external longitudinal flow over bundles of tubes. Some of the data given in this paper are from previously published works by these authors. The results are given in a series of graphs. It is found that q_{cr} is inversely related to pressure for water flow within the tubes. The dependence on pressure is reduced when the mass velocity of

Card 1/2

L 65197-65
ACCESSION NR: AP5006297

the water flow is increased. For flow within tubes, q_{cr} is inversely related to the enthalpy of the water in the crisis zone, the effect of enthalpy increasing with the rate of flow of the water. The complex relationship between q_{cr} and various combinations of parameters is discussed for external longitudinal flow. There is a theoretical difference between the cases of internal and external cooling with respect to the effect of flow parameters and secondary factors on q_{cr} in external flow. Care should be taken when generalizing experimental data not to depend on extrapolation into regions where there is no reliable empirical basis for this procedure, since experience has shown that q_{cr} is sometimes a complex function of the flow parameters and various secondary factors. Orig, art. has: 8 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ME

NO REF SOV: 012

OTHER: 002

MAR
Card 2/2

USSR/Farm Animals. Small Horned Cattle

Q-3

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50035

Author : Peskov P.G., Polkanov M.I.

Inst

Title : Mineral and Vitamin Deficiency in Highly Productive Cows

Orig Pub : Veterinariya, 1957, No 4, 79

Abstract : Overfeeding cows with concentrate in the absence of pasture and regular exercise resulted in marked mineral and vitamin deficiency, a fact confirmed by clinical and biochemical findings. When feeding and keeping conditions were improved, and this was accompanied by injections of vitamin D and A concentrates every 10 days, the productivity of the cows increased. It is suggested that vitamin injections be given during the winter season (December to March) each month in 5-1 dosages.--F.M. Kozantsev

Card : 1/1

PESKOV, P.G. veterinarnyy vrach.; POLKANOV, M.I., veterinarnyy vrach.

Mineral and vitamin deficiency in highly productive cows. Veterinariia
34 no.4:79 Ap '57. (MIRA 10:4)

1. Sovkhoz "Krekshino", Norofominskogo rayona, Moskovskoy oblasti.
(Deficiency diseases in domestic animals)
(Cows--Diseases and pests)

PEKOV, P. G., Maj

PA 31/49T97

USSR/Medicine - Disinfection and Disinfectants Aug 48
Medicine - Sterilization, Surgical

"Universal Steam-Generator Equipment," Maj P. G. Peskov, 1 $\frac{1}{4}$ pp

"Veterinariya" No 8

Describes generator, giving diagram of pipe lines. Steam is used for sterilizing instruments and dressings, producing distilled water, etc.

31/49T97

"Treating Injuries of the Tendons of Extremities
with Plaster of Paris Casts," Veterinariya,
No. 6, 1949. Major in the Vet. Service, -c1949-.

PESKOV, P. G., (Chief Veterinary Surgeon of the Moscow Railway Administration)

Railroad transportation of birds

Veterinariya vol. 38, No. 10, October 1961, pp 74

PESKOV, P.G.

Prospects for the transportation of refrigerated meat.
Veterinariia 41 no.7:94-95 J1 '64.

(MIRA 18:11)

1. Zamestitel' nachal'nika veterinarnoy sluzhby Upravleniya
Moskovskoy zheleznoy dorogi.

L 16783-66 EWT(1) GM
ACC NR: AT6002833

SOURCE CODE: UR/2531/65/000/180/0047/0057

AUTHOR: Peskov, P. I.

ORG: none

21
B+1

TITLE: Heat balance on the floodplain of a river

SOURCE: Leningrad, Glavnaya geofizicheskaya observatoriya. Trudy, no. 180, 1965.
Voprosy mikroklimata (Problems of microclimate), 47-57

TOPIC TAGS: heat balance, climatology, earth radiation

ABSTRACT: This paper discusses data obtained on an expedition to the Osetr River in 1961 and to the Oka in 1962. Heat balance on the floodplains is compared with that of the surrounding regions. It was found that the radiation balance is 3-4% lower on the floodplains than in the surrounding regions. On the floodplains, 75-80% of the radiation balance is expended on the evaporation. The value for the surrounding regions is 50% in dry weather and 60-65% in moist weather. Turbulent heat flow in the air above floodplains is but one-third that in the surrounding regions during dry weather (15-18% of the radiation balance)

Card 1/2

2

L 16783-66

ACC NR: AT6002833

and up to one-half that in the surrounding regions during wet weather (20--25%). When a valley is broad, a decrease in turbulent exchange above the floodplain leads to disturbance of convective cloudiness, which means that clouds disappear, and this may lead to a change in the components of heat balance. Heat flow in the soil of the floodplain is about the same as that in the underlying rock of the bank, representing about 2% of the radiation balance. The maximum is at 7--9 a.m. and the minimum (negative) at 5--7 p.m. Cultivation on the floodplain brings about changes in heat balance. In pea fields the expenditure of heat on evaporation is 55% of the radiation balance, and a complete plant cover may require almost the entire radiation balance. Turbulent heat flow in the air changes from 50% of radiation balance when shoots first appear to 0% when the surface is covered with vegetation. A temperature inversion may occur if the plant cover is thick enough. Orig. art. has: 1 figure and 5 tables.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 011

Card 2/2 MC

I 29180-66 EWT(1) CW

ACC NR: AT6018880

SOURCE CODE: UR/2531/65/000/180/0047/0057

AUTHOR: Peskov, P. I.

ORG: none

32
BT1TITLE: Heat balance on the floodplain of a river

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 180, 1965, 47-57

TOPIC TAGS: atmospheric evaporation, atmospheric turbulence, atmospheric cloud, atmospheric radiation

ABSTRACT: This paper discusses data obtained on an expedition to the Osetr River in 1961 and to the Oka in 1962. Heat balance on the floodplains is compared with that of the surrounding regions. It was found that the radiation balance is 3-4% lower on the floodplains than in the surrounding regions. On the floodplains, 75-80% of the radiation balance is expended on the evaporation. The value for the surrounding regions is 50% in dry weather and 60-65% in moist weather. Turbulent heat flow in the air above floodplains is but one-third that in the surrounding regions during dry weather (15-18% of the radiation balance) and up to one-half that in the surrounding regions during wet weather (20-25%). When a valley is broad, a decrease in turbulent exchange above the floodplain leads to disturbance of convective cloudiness, which means that clouds

Card 1/2

L 29180-66

ACC NR: AT6018880

disappear, and this may lead to a change in the components of heat balance. Heat flow in the soil of the floodplain is about the same as that in the underlying rock of the bank, representing about 2% of the radiation balance. The maximum is at 7-9 a.m. and the minimum (negative) at 5-7 p.m. Cultivation on the floodplain brings about changes in heat balance. In pea fields the expenditures of heat on evaporation is 55% of the radiation balance, and a complete plant cover may require almost the entire radiation balance. Turbulent heat flow in the air changes from 50% of radiation balance when shoots first appear to 0% when the surface is covered with vegetation. A temperature inversion may occur if the plant cover is thick enough. Orig. art. has: 1 figure and 6 tables. [JPRS]

SUB CODE: 04 / SUM DATE: none / ORIG REF: 011

Card 2/2 PB

PESKOV, P.I.

Heat balance of an alluvial plain. Trudy GGO no. 180147-57 '65.
(MIRA 18:9)

PESKOV, P. I.

SOV-49-58-6-3/12

AUTHORS: Shuleykin, V. V., Gushchin, V. F., Peskov, P. I.

TITLE: Oscillations in the Heat Balance of the Atlantic Ocean
(Kolebaniya teplovogo balansa Atlanticheskogo Okeana)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya,
1958, Nr 6, pp 729-740 (USSR)

ABSTRACT: Descriptions of normal investigational methods into heat balance problems are found in Ref.1. The present article considers oscillations in components of the heat balance and their course in the Atlantic (from day to day) in various regions of interest. It will be shown that these oscillations exceed the corresponding ones averaged over a month. This blurs the general pattern but enables local oscillations (obtained by the ship Sedov) to be considered - the times examined lie between October and December and the latitudes from 50° - $16^{\circ}27'$ N. Fig.1 gives the values of some of the elements which change from day to day. Curve 1 shows the change in latitude of a place at true midday in October, November and December 1957. Curve 2 gives the change in solar height at culmination. Curve 3 gives the change in temperature of the water surface and Curve 4 the change in temperature of the air. The first points on all these diagrams (11, 12 and 13 Oct) correspond to the N. Sea. Position coordinates at true noon were cal-

Card 1/12

Oscillations in the Heat Balance of the Atlantic Ocean. NOV-4, 1955-3/1

culated by A. Kh. Gil'mutdinov. Actinometric and meteorological observations were made by V. F. Gushchin, V. A. Krasnov, P. I. Peskov, I. G. Serebrennikov, V. P. Shirokov, V. G. Fedorov and D. I. Filippov.

1. Heat intake from direct and diffuse solar radiation.

As in the hydrographical ship "Taymyr" (Ref.2), an actinometer was used which permitted continuous registration of direct and diffuse radiation falling per cm^2 of horizontal surface (Ref.3). The radiation receiver (a piranometer, mounted on gimbals on the mizzen mast - out of the shade) was connected to a self-recording galvanometer. Every twenty seconds a mark was made on a tape which unrolled at 1 cm/hour (driven by a synchronous electric motor). Examples of these traces (reduced in scale) are given in Fig.2. This instrument was calibrated several times during the voyage by a system due to Yu. D. Yanishevskiy. The scale is not entirely linear, being smaller for small deviations than for large. Had the solar height remained fairly constant, this could have been

Card 2/12

30V-4-58-6-3/12

Oscillations in the Heat Balance of the Atlantic Ocean.

allowed for by graduating and measuring the traces with a millimeter. However, the ship worked at various latitudes and a different method was therefore necessary. A trapezium was constructed: the ordinate axis was read from the scale divisions of the galvanometer. Straight lines were then drawn parallel to the abscissa. A millimetre ruler was used to measure the total length of all segments cut off. The time-scale was known from the construction of the instrument and the ordinate of each elementary segment was known by calibration. Thus the result could be obtained. Curve 1 (Fig. 6) shows the change in diurnal heat sum per cm^2 of the Atlantic surface (at different stages on the voyage). As can be seen, on clear days the heat sum changes (depending on latitude) from 287 to 506 cal/day/cm^2 , although, in the same region, the variation extends from 56 to 506 cal when cloudy days are included. One of the authors (Ref. 1) has introduced a coefficient of solar energy utilisation to characterise the influence of clouds. This can be found by calculating the greatest possible heat sum which can reach 1 cm^2 of a horizontal surface by direct solar radiation in a perfectly clear sky (at a given latitude and day of the year). Such quantities were found for latitudes $50^\circ - 30^\circ \text{N}$

Card 3/12

SOV-10-5 10-1/12

Oscillations in the Heat Balance of the Atlantic Ocean.

(Refs.1, 2) and $50^{\circ}-0^{\circ}$ (Ref.3). Fig.3 gives part of a diagram by N. I. Yegorov for the three months - October, November and December. From this we can obtain q_0 (the quantity described). If the corresponding, actually measured magnitude is q , $\eta (= q/q_0)$ is called the utilization coefficient. The curve marked 0 in Fig.6 gives values for q_0 . N. I. Yegorov has compared the change in η with the change in cloudiness for the Indian Ocean and the Red Sea (Fig.3, Ref.3). Fig.4 gives a similar comparison for the parts of the Atlantic investigated (small circles - points obtained in October; black dots - points obtained in November, and squares - points obtained in December) The dotted line gives N. I. Yegorov's results for comparison. As is shown in Ref.3, a scatter of points is unavoidable since the amount of cloud, unlike the radiation, is not recorded continuously. A small correction is needed to allow for the fact that q_0

Card 4/12

SOV-4)-58-6-3/12

Oscillations in the Heat Balance of the Atlantic Ocean.

is defined for direct radiation whilst q includes also diffuse radiation (thus the experimental curve has some points with $\eta > 1$). A comparison of Yegorov's material with that in the present article indicates that the relation between η and degree of cloud is universal to a sufficiently close approximation.

2. Amount of heat penetrating into the water. Previously, only the amount of heat reaching the surface has been considered. To consider the amount entering the water it is necessary to calculate the extent of reflection. One of the authors has already considered the reflection coefficient of the sea's surface (Ref.1). Sverdrup (Ref.4) has made similar investigations for both direct and diffuse reflection at varying solar heights. On the basis of these calculations, the authors have constructed a diagram of change in reflected energy depending on the hour angle of the Sun. Fig. 5. (a) and (b), gives two such diagrams - one corresponding to the Northern course of the 'Sedov' and the other to the Southern. The scales of the two diagrams are different, and, in both cases, the curve for the reflected rays is ten times larger than the curve for the daily variation of direct and diffuse radiation. The reflection coefficient reaches high values.

Card 5/12

NOV-49-50-5-3/12

Oscillations in the Heat Balance of the Atlantic Ocean.

at small angles - thus it has dropped from 0.4 at 5° to 0.12 at 20°. After 50° it remains almost constant at 0.03. As a result, the total reflected energy per day changed little as the 'Sedov' changed from its northerly to its southerly route. By graphical integration the empirical formula for the amount of reflected heat:

$$\Delta q = 35 \eta \zeta \text{ m cal/day cm}^2 \quad (1)$$

was obtained, where η is the utilisation coefficient and ζ is an empirical coefficient, changing by 20% between the northerly and southerly routes, but approximately equal to one. Fig. 6, curve 1, gives Δq thus calculated for each day and, thence, curve 2 which shows the amount of heat penetrating the water.

3. Heat loss by evaporation. This was the most important heat loss factor in the regions surveyed. One of the authors (Ref.1), in experiments in the Indian Ocean, found that the amount of water evaporating/unit time/unit surface area depended on the humidity deficiency and the wind speed. It

Card 6/12

NOV- 1957-6-1/10

Oscillations in the Heat Balance of the Atlantic Ocean

was emphasised that in determining the former, the compressibility of water vapour at the given temperature must be found and also the humidity gradient between the surface of the sea and the measuring point. Sverdrup (Ref.4), basing his work on the theory of turbulent diffusion, confirmed a linear relationship first put forward by V. V. Shuleykin. This has been shown to give good results in many cases (Refs.2, 3, 5). Using this relationship, the results obtained in the Atlantic can be expressed by:

$$q_e = 5.85 (e_w - e_6) V_6 \text{ m.cal/day/cm}^2 \quad (2)$$

where e_w is the water vapour compressibility at the given surface temperature; e_6 is the compressibility at a height of 6 m above the surface (both expressed in millibars); and V_6 is the wind velocity in m/sec at this height. Curve 2 in Fig.6, gives the results obtained with this formula. As can be seen, on some days the amount of heat lost by evaporation exceeded that gained from solar radiation. The heat lost varied from 330-100 cal/cm². The loss by evaporation remains approximately constant at all latitudes investigated and

Card 7/12